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RSS for the Enterprise: A Primer

RSS has emerged as the de-facto format for "syndicating" content over the Internet. How is this syndication style of communication different that other means of electronic communication?   What advantages does it offer the enterprise?

Really Simple Syndication (RSS) solves several problems:

1. **RSS provides a way to "watch" information sources.**
   No one can dispute that the internet continues to grow in value as an information resource. Web users typically bookmark sites that provide the content they are interested in. But to stay abreast of the changes they must return to these sites periodically and scan for new content – a hit and miss proposition.   Even if a user were to continuously "Google" for content, the results are unpredictable and subject to the time lag of Google's™ harvesting process. Enter RSS.
   RSS allows a person to establish a link to an information source and then *watch* for updates. The users need not go to the site; the new site content is delivered to them. With an RSS reader the user can consolidate the monitoring of many information resources into a single view. New items are quickly scanned and drilled into as needed.

   Enterprises can benefit from this means of information delivery. Typically a business user needs to login and navigate through an enterprise application (e.g., CRM, ERP) to find new information. While much of this information could benefit others throughout the enterprise or beyond, it is locked inside applications accessible only to those that have the login and the training to find it. Even with access and training, the users must often search across multiple systems to collect the key indicators that drive their decision making. Portals have attempted to address this problem, but they typically require complex integration software to tap the back office systems and developers to write custom code to view the data. This limits the number of projects and information sources that can be justified by the expense.   Enabling these systems to automate the continuous publishing of information in a common format (RSS), and display it in common interface, adds incredible value to the information resources.

2. **RSS establishes common publisher-subscriber model for the internet.**
   This is also called "syndication." The publisher organizes related content into a particular subject matter topic or "channel" and exposes it on the web as a link or URL.   Subscribers can link to these channels by referencing the URL from an RSS reader and receive ongoing updates as long as it suits their purpose. Publishers and subscribers may come and go, and channels created or removed, without breaking the system.   Through this method, a single publisher can reach a very large audience (the internet.)

   KnowNow® has extended the publisher/subscriber roles to include not only people, but enterprise systems, desktop applications, spreadsheets and other software that creates and consumes information.   This allows RSS to automate process-to-process commutations across IT resources. This is a flexible and low cost method for integrating applications.

3. **Subscribers are in control.**
   RSS puts the consumer in control of the information exchange. The subscriber can drop or add a channel at will. Contrast this to typical email distribution that gives the publisher total control. The publisher's newsletter or product updates can quickly become spam to the recipient. Even when as asked to stop an email subscription, it is up to the good will of the publisher to comply with the request. The nature of the RSS relationship avoids the spam that pollutes email inboxes (more about this in the next section.)

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4. **RSS breaks the bonds of email.**
    As soon as a publisher posts new information via RSS, the subscriber has access. There is immediacy and directness that bypasses problems with email. Email is often subject to store-and-forward across multiple mail servers, spam filters, and cluttered inboxes which reduce reliability, timeliness, and visibility. With email you must know the identity (email address) of everyone in your audience, and if they are outside of the enterprise, request that they opt-in to your messages. The list of identities must also be constantly maintained, adding to IT costs. This limits the reach of messages that you may want to "broadcast" to a wide audience - anonymous users are out of bounds with email.
    RSS also provides context. With RSS, information is published via channels that are focused on a specific topic or area of interest. You can target your message to a community of interest by the way you categorize your content. With email all messages are dumped into a single inbox that is often laden with spam that has no inherent context. Another tool, instant messaging, may provide immediate communication, but it is restricted to one-to-one communication to known parties and messages are not structured or standardized in any useful way to aid integration.

> *Technical Sidebar:*
> *A dirty little secret (well maybe not so secret :) Almost all RSS readers rely on a means of periodically checking for updated RSS content, referred to as "polling." This of course adds a lag time (or "latency") to the information delivery. For blog content this is typically not a significant problem, as the content may be updated only a few times during a day. But for critical business events, this delay can be costly. KnowNow has enabled the real-time "push" of RSS, making it applicable to event-driven business processes and delivery of real-time alerts.   This also reduces the network traffic, eliminating the needless checking for data that has not changed, and adds scalability to deliver RSS content simultaneously to very large groups of users.*

5. **RSS provides a predictable structure for easier integration.**
    RSS is an XML format. This means it is structured to be machine readable and capable of acting as a message bridge between automated systems. Most computers are capable of generating their information in XML format and parsing the XML. This makes integration between business processes much easier and less costly. There are also established standards for transforming one XML format into another format, allowing for the RSS information to morph into various reporting formats or a format for mobile devices. In contrast, the body of an email message does not provide a reliable structure and therefore fails most attempts to use it as an integration vehicle.

6. **RSS provides a quick read.**
    RSS was designed first for simplicity of format, to support news and event summaries. This format allows for the quick scan of item abstract but includes web links that allow navigation to more extensive content hosted by the RSS provider. An RSS reader (or "aggregator") is optimized to provide rapid reading of continuously changing information, highlighting the most recent information. Some RSS readers may also add alert indicators for business critical events that should be acted upon immediately.

    But the RSS format is also *extensible*, meaning that more complex types of data can be enclosed in the RSS message, such as an automated link that can stream music or other programming to an IPOD or other MP3 music player.   This is called "podcasting." Podcasting is spawning a new industry for personalized "radio", enabled by RSS.

7. **Easier enterprise communications – bridging systems and people.**
    To date, RSS has been used predominantly as a means to syndicate content from public web sites, driven by individual publishers seeking an audience for their special interest. This is a one-to-many, person-to-person communication at which RSS has excelled.   But RSS has the potential to revolutionize enterprise communications.   RSS can extend the reach of enterprise applications, providing a reporting medium that continuously delivers business events and key performance indicators as they happen.   Not just person-to-person communication, but process-to-person, and process-to-process communication are possible.   The end-points can be CRM or ERP systems, databases, spreadsheets, or pages in a portal.   With the addition of RSS management software the scope and control can be adjusted as needed - channels can be open or secure, widespread

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broadcasts, or narrowly targeted private departmental channels.
KnowNow accomplishes this by adding "private" enterprise RSS channels to exchange protected information. Identity management systems can be used as needed to authenticate subscribers and restrict access based on group or individual permissions.

Enterprises, manufactures, or media companies may also want to designate certain channels for fixed or high visibility, to communicate urgent support news, alerts, or product offers to all employees or customers.   KnowNow adds this capability via its *SpeedReader®* RSS browser with real-time channels.

Applications for Enterprise RSS can be as diverse as:
- Business activity monitoring
- Call center tracking
- Inventory availability
- Policy and compliance notifications
- Risk management reporting
- Remote sensor reporting, such as RFID
- System-to-system event exchange
- Customer support information (updates, fix notifications, and promotions)
- Security monitoring
- Short-term offers (last minute ticket availability for concerts; sporting events, etc.)

RSS has emerged as a simple but universal format for sharing information over the web. Enterprise RSS products such as KnowNow allow businesses to take advantage of this new communication style and apply RSS benefits to existing business processes.

"Blogmania"

Notice that I have yet to mention the word "blog?" Of course blogging has popularized the RSS format, but the capabilities mentioned above have made widespread adoption possible. The immediacy and flexibility of RSS allows the news consumer to construct a virtual newspaper that is continuously updated. When a world or local event occurs, the subscriber knows about it in minutes or seconds.   Once a person begins to get the news via RSS, they invariably notice that much of the traditional newspaper seems to include yesterday's news. That is why news services have begun to acquire blogging companies. The newsprint version delivered once a day seems threatened with extinction.
Blogs also empower anyone to be a publisher, even your aunt Nana, or the political pundit you detest. While these grassroots voices are often endearing and certainly democratic, the veracity of supposedly "serious"content is often suspect, and journalistic standards bypassed.   For this reason blogs have gained a reputation as a medium for crackpots and navel gazing.   But in reality the fringe gets overexposed - recall that the subscriber is in control – and the blog medium is what you make of it. Experienced subscribers develop their "trusted sources" and meaningful channels, and when the publisher violates this trust, the relationship is severed with the click of a mouse. This self-weeding process will sort itself out over time - the credible sources will thrive and those that lose credibility will soon be speaking to no one. Blogs are only one manifestation of the RSS medium. Nonetheless, RSS has driven this new medium that is changing how we communicate.

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